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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

**MAILED** 

Application Number: 10/750,238 Filing Date: December 31, 2003 Appellant(s): LEWIS ET AL.

DEC 1 9 2007

**GROUP 3600** 

Steven R. LeBlanc For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed November 6, 2007 appealing from the Office action mailed August 17, 2006.

10/750,238 Art Unit: 3654

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

2002/0117578	Denen et al	8-2002
6,419,136	Formon et al	7-2002
6,894,711	Yamakawa et al	5-2005
6,962,451	Narita et al	11-2005
6,363,057	Ardalan et al	3-2002

10/750,238

Art Unit: 3654

5,452,832

Niada

9-1995

Page 3

6,069,354

Alfano et al

5-2000

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 5-8, 15-19, 21-23, 25-27, 29-31, 34-37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Denen et al (U.S. Pat. Appl. Pub. No. 2002/0117578).

Denen et al discloses an apparatus adapted to dispense a web of sheet material from a continuous roll comprising: a support 12 configured to rotatably support a roll 20 of sheet material which includes identification (perforations 32) relating to a type of sheet material on the roll, a processor (included in 22, 28, 68, 24) configured to receive data relating to the type of the sheet material on the roll, process the data, and generate an output command, and a controller (included in 22, 28, 68, 24) configured to control the length of sheet material dispensed from the roll in response to the output command. The identification relates to the absorbent characteristics of the sheet material since the length of each sheet (determined by the locations of the perforations) affects how much liquid the sheet is capable of absorbing. The apparatus includes a reader 22 for reading data from identification on the roll of sheet material as recited in claim 2. The identification 32 is on the sheet material as recited in claim 5.

With regard to claim 17, the device as disclosed is operable when the cover is open.

10/750,238 Art Unit: 3654

With regard to claims 19 and 36, note that Fig. 9 applies to the Fig. 10 embodiment when the brake is replaced with drive motor 88. See the description of Fig. 10 starting at col. 11, line 9.

With regard to claims 21 and 37, note the electric motor 88 of the Fig. 10 embodiment.

With regard to claim 29, the web material having the perforations is on the core of the roll.

With regard to claim 34, the device as disclosed is openable when the cover is open.

With regard to claim 35, the identifier of Denen et al is deactivated after identification of the sheet material on the roll, at least when the feeding apparatus is turned off.

Claims 1-4, 9, 14-16, 25, 27, 28, 32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Formon et al (U.S. Pat. No. 6,419,136) in view of Yamakawa et al (U.S. Pat. No. 6,894,711).

Formon et al discloses an apparatus adapted to dispense a web of sheet material from a continuous roll comprising: a support 38' configured to rotatably support a roll 25 of sheet material which includes identification (perforations determining individual sheet length) relating to absorbent characteristics of sheet material on the roll, a processor (included in 53) configured to receive data indicating sheet length (which relates to absorbent characteristics) of the sheet material on the roll, process the data,

10/750,238

Art Unit: 3654

and generate an output command, and a controller (included in 53) configured to control the length of sheet material dispensed from the roll in response to the output command. The processor receives the data indicating sheet length from a switch, dial, or button set by an operator in accordance with the length of sheets on a roll of sheet material being loaded into the dispenser.

Formon et al does not disclose an RFID tag on the roll of sheet material or a reader that reads data from identification on the roll of sheet material. Formon et al does not explicitly state that the processor includes an algorithm stored in a chip set embedded on a printed circuit board.

Yamakawa et al teaches providing a RFID tag 20 on a roll of sheet material on the sheet material and at the core (inner portion) of that roll and teaches providing a reader for the tag.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Formon et al with an identification in the form of a RFID tag on the roll or core of sheet material as taught by Yamakawa et al in lieu of switches or dials for manually entering data relating to absorbent characteristics of the sheet material as taught by Yamakawa et al to further automate operation of the device and eliminate errors resulting from operator error in the entry of the paper characteristics.

With regard to claim 14, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Formon et al with a processor that includes an algorithm stored in a chip set embedded on a printed circuit board since

10/750,238 Art Unit: 3654

it is old and well known to use controllers having this structure for inexpensively performing complex control functions such as those disclosed by Formon et al.

With regard to claim 35, it would have been obvious to deactivate the identifier by shutting off the dispenser for maintenance or repair and to deactivate the identifier after initially identifying a newly loaded roll in a manner analogous to the process of manually entering the data (in which data is entered initially only) since the material characteristics do not change during the dispensing of a roll of material.

Claims 10, 11, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Formon et al (U.S. Pat. No. 6,419,136) in view of Yamakawa et al (U.S. Pat. No. 6,894,711) as applied to claim 1 above, and further in view of Narita et al (U.S. Pat. No. 6,962,451).

Formon et al does not disclose an infrared emitter/detector circuit arranged to emit infrared light into the core and detect reflection of light off the identification.

Narita et al teaches providing an infrared identification on a core of web material indicating the type of material on the core and an infrared emitter/detector circuit arranged to emit infrared light into the core and detect reflection of light off the identification.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Formon et al with an infrared emitter/detector circuit arranged to emit infrared light into the core and detect reflection of light off of an identification on the core as taught by Narita et al to permit inexpensive manufacture of

10/750,238 Art Unit: 3654

the identification. The method of claim 33 is inherent in the operation of the modified apparatus of Formon et al.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Formon et al (U.S. Pat. No. 6,419,136) in view of Yamakawa et al (U.S. Pat. No. 6,894,711) and Ardalan et al (U.S. Pat. No. 6,363,057).

Formon et al and Yamakawa et al are advanced above in the rejection of claim 1.

Formon et al does not disclose first and second networks, a gateway operatively coupled to the networks, or an HTTP server embedded in one of the gateway and a plurality of microcontrollers.

Ardalan et al teaches connecting a plurality of independently operable and remotely located devices through a network and a gateway to another network. An HTTP server is embedded in the gateway or microcontrollers of the devices.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Formon et al with first and second networks connected by a gateway, connecting the plurality of dispensers, and having embedded HTTP servers as taught by Ardalan to facilitate use and configuration of the control system for the dispensers by making use of standard software and protocols.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denen et al (U.S. Pat. Appl. Pub. No. 2002/0117578).

Denen et al is described above.

10/750,238

Art Unit: 3654

Denen et al does not disclose a processor that includes an algorithm stored in a chip set embedded on a printed circuit board.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Denen et al with a processor that includes an algorithm stored in a chip set embedded on a printed circuit board since it is old and well known to use controllers having this structure for inexpensively performing complex control functions such as those disclosed by Denen et al.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denen et al (U.S. Pat. Appl. Pub. No. 2002/0117578) in view of Niada (U.S. Pat. No. 5,452,832).

Denen et al is described above.

Denen et al does not disclose a lockout switch for preventing operation of the controller when the dispenser housing is open.

Niada teaches providing a lockout switch (contacts 35, 36) for preventing operation of the controller when the dispenser housing is open.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Denen et al with a lockout switch as taught by Niada to prevent injury to maintenance personnel when servicing the dispenser.

10/750,238

Art Unit: 3654

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denen et al (U.S. Pat. Appl. Pub. No. 2002/0117578) in view of Yamakawa et al (U.S. Pat. No. 6,894,711).

Denen et al is described above.

Denen et al does not disclose an RFID tag on the roll of sheet material.

Yamakawa et al teaches providing a RFID tag 20 on a roll of sheet material and at the core (inner portion) of that roll.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Denen et al with an identification in the form of a RFID tag on the roll or core of sheet material as taught by Yamakawa et al to identify the type of material to determine the information required by the controller.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denen et al in view Alfano et al (U.S. Pat. No. 6,069,354).

Denen et al is described above.

Denen et al does not disclose structure for dispensing sheet material in response to sensing a user's hand adjacent the dispenser housing.

Alfano et al teaches dispensing sheet material in response to sensing a user's hand adjacent a dispenser housing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dispenser of Denen et al to dispense sheet material in

Art Unit: 3654

response to sensing a user's hand adjacent the dispenser housing to improve convenience and sanitation in the use of the dispenser.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denen et al (U.S. Pat. Appl. Pub. No. 2002/0117578) in view of Ardalan et al (U.S. Pat. No. 6,363,057).

Denen et al is described above.

Denen et al does not disclose first and second networks, a gateway operatively coupled to the networks, or an HTTP server embedded in one of the gateway and a plurality of microcontrollers.

Ardalan et al teaches connecting a plurality of independently operable and remotely located devices through a network and a gateway to another network. An HTTP server is embedded in the gateway or microcontrollers of the devices.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Denen et al with first and second networks connected by a gateway, connecting a plurality of dispensers of Denen et al, and having embedded HTTP servers as taught by Ardalan to permit more efficient adjustment and monitoring of a plurality of dispensers from a single or minimal number of locations.

## (10) Response to Argument

Appellants argue that Denen et al does not disclose or teach the structure recited in claims 1 and 25 because Denen et al discloses a dispenser with a web perforation

by the perforations in Denen et al.

10/750,238 Art Unit: 3654

sensor 22 and that the perforations are not necessarily or reliably related to absorbent characteristics of the web. However, claim 1 requires an identifier configured to identify the absorbent characteristics of sheet material on the roll from an identification on the roll, a processor configured to receive data relating to the absorbent characteristics of the sheet material and process the data and generate an output command, and a controller configured to control the length of sheet material dispensed from the roll in response to the output command. This language is functional and only recites intended use. Since claim 1 is directed to an apparatus, the apparatus of Denen et al need only be capable of the recited function. The apparatus of Denen et al is at least capable of the claimed functions since, by Appellants' own admission, the perforations may be related to absorbent characteristics of the sheet material. Additionally, contrary to Appellants' assertions, the perforations in the sheet material in Denen et al are directly related to absorbent characteristics since the absorbent capacity per sheet (between successive perforations) of the sheet material is proportional to the spacing of the perforations (i.e., the length of the sheets). Denen et al, therefore, has structure that identifies absorbent characteristics of the sheet material, processes data relating to the

absorbent characteristics, and controls the length of sheet material dispensed based on

the data. The method of claim 26 is inherent in the operation of the device of Denen et

al. It is noted that the claimed identification and identifier perform no other function than

determining the length of material to be dispensed. This is the same function performed

10/750,238

Art Unit: 3654

Appellants argue that Formon et al dispenses sheet material based on the locations of perforations rather than on absorbent characteristics of the sheet material. However, the device resulting from the combination of Formon et al and Yamakawa et al is capable of performing the operations represented by the functional language of claims 1 and 25. In addition, the device would perform the recited functions and method steps recited in claims 27, 28, 32, and 35. As discussed in connection with Denen et al. the absorbent characteristics of the sheet material depend on the sheet length and the sole function of the claimed identification is to set feed length. Contrary to Appellants assertions, the dispenser in Formon et al does not determine feed length by sensing of perforations. Rather, feed length is determined by detection (manually) of the absorbent characteristics (i.e., sheet length) of the sheet material and inputting this data into an input device (switch, dial, or button; col. 5, lines 22-26). The dispenser does not depend on the presence of perforations to determine feed length. Yamakawa et al teaches automation of the process of inputting the data related to wound sheet material characteristics by providing an identification attached to a roll of the sheet material and an identifier to read the identification. The identification is read automatically and used to control a machine that handles the sheet material.

With regard to Appellants' argument regarding claims 27, 28, 32, and 35 that parent claim 26 has not been rejected on Formon et al and Yamakawa et al, it is noted that the lack of such a rejection is not inconsistent since no indication that claim 26 is allowable is present in any Office action. The first Office action contained no rejection of claim 26 based on Yamamoto. Yamamoto was replaced with Formon et al in the

10/750,238 Art Unit: 3654

second Office action due to amendments to the claims. Amendments made between the first and second Office actions changed the dependencies of claims 27, 28, 32, and 35. Claim 26 was rejected on Denen et al in the first and second Office actions.

Appellants have presented no specific arguments as to why claims 27, 28, 32, and 35 (or even the subject matter of claim 26) are patentable over Formon et al in view of Yamakawa et al.

Appellants have not made any additional arguments concerning claims 10, 11, 14, 20, 33, 38, and 40.

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Supervisory Patent Examiner
Technology Center 3600

40/40/07

Conferees:

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